

Weekly COVID-19 Update in Montana (as of 3/4/2022)

This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of March 4, 2022. Data are provisional and expected to change as more information is received.

Case Data

Table 1. Summary of COVID-19 Activity – Montana, as of 3/4/2022

	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
REPORTED CASES	271,137	2,587	-1%
LABORATORY TESTS	2,661,150	24,352	+11%
HOSPITALIZATIONS	11,700	102	-37%
DEATHS	3,208	21	-67%

Figure 1. COVID-19 Cases and Hospitalizations over Time – Montana, as of 3/4/2022

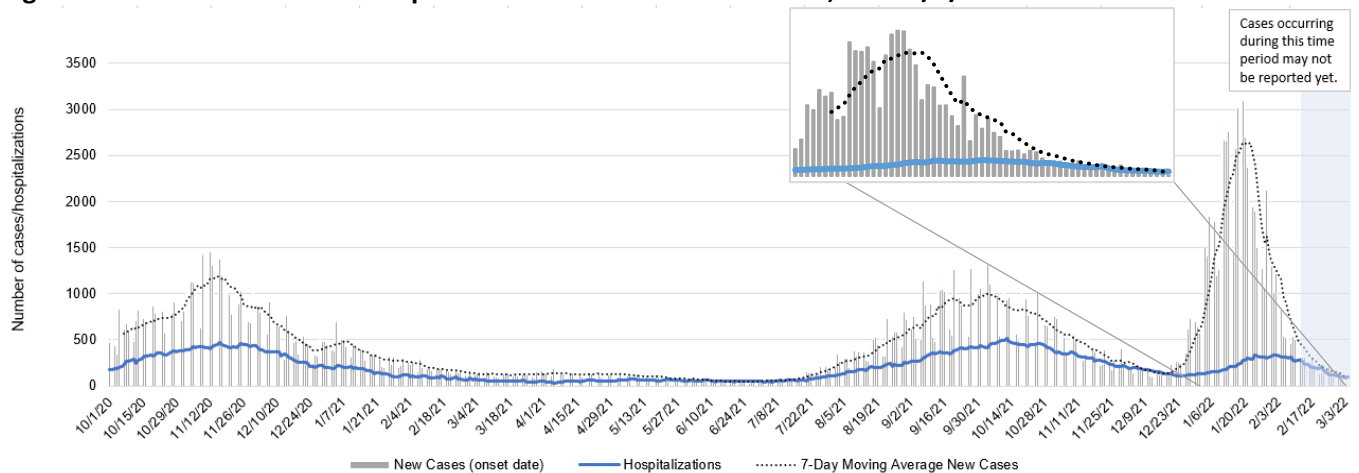


Figure 2: Status of Acute Care and ICU Beds – Hospitals in Montana, 2/23 – 3/8/2022

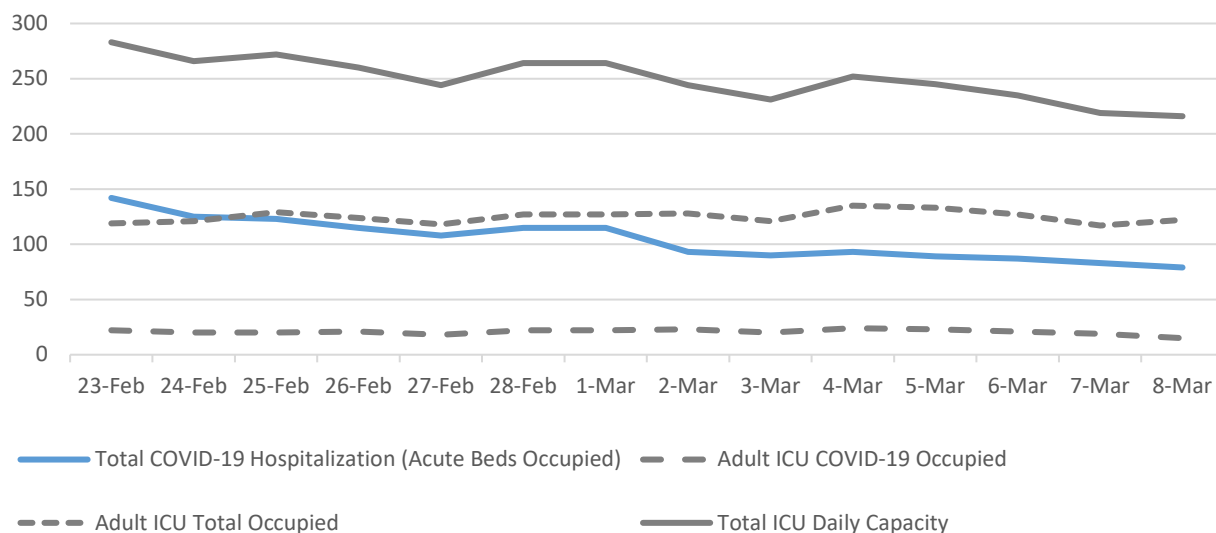
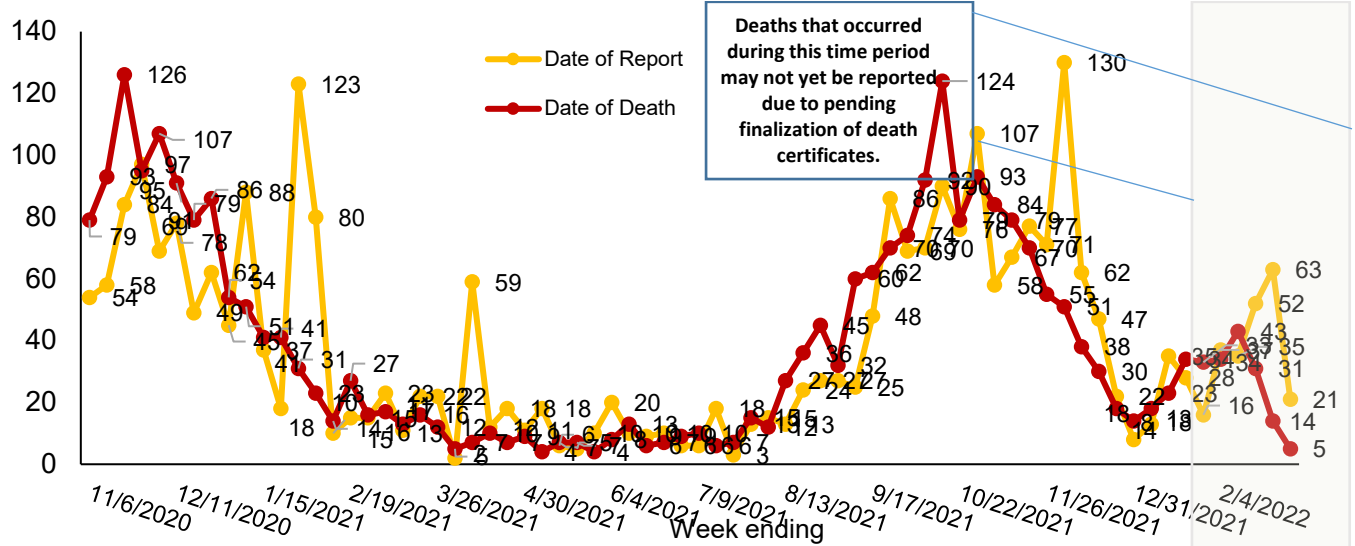


Figure 3. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 3/4/2022



Vaccine Data

Montana began vaccinating individuals in mid-December 2020 with a phased process: Phase 1A on December 14, 2020, Phase 1B on January 19, 2021, and Phase 1B+ on March 8, 2021. Vaccinations were opened to all Montanans age 16+ on April 1, 2021 and expanded to all Montanans age 12+ on May 10th, 2021. Most recently, the Pfizer vaccine was approved for the 5-11 year old age group on October 29th, 2021. To date, 1,409,925 doses have been given across the state and 55% of the eligible population is considered fully vaccinated (table 2).

Table 2: COVID-19 Vaccine Doses Administered for the 5 and older population – Montana, as of 3/4/2022

	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 2/18	WEEK ENDING 2/25	WEEK ENDING 3/4*
TOTAL DOSES ADMINISTERED	1,409,925		3,784	3,070	2,507
DOSE 1 ADMINISTERED	628,982	62%	965	735	548
FULLY VACCINATED INDIVIDUALS	556,762	55%	1,203	1,067	829

*the data for the most recent week are preliminary and are expected to be an underestimate of the doses administered during the week, due to a reporting lag.

Figure 4. COVID-19 Vaccine Doses Administered by Week, 5+ Years – Montana, as of 3/4/2022

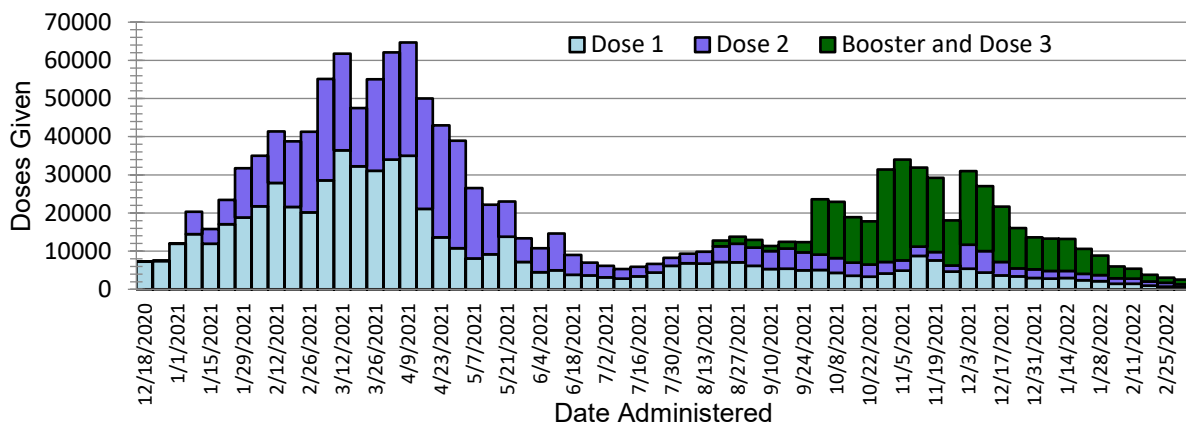
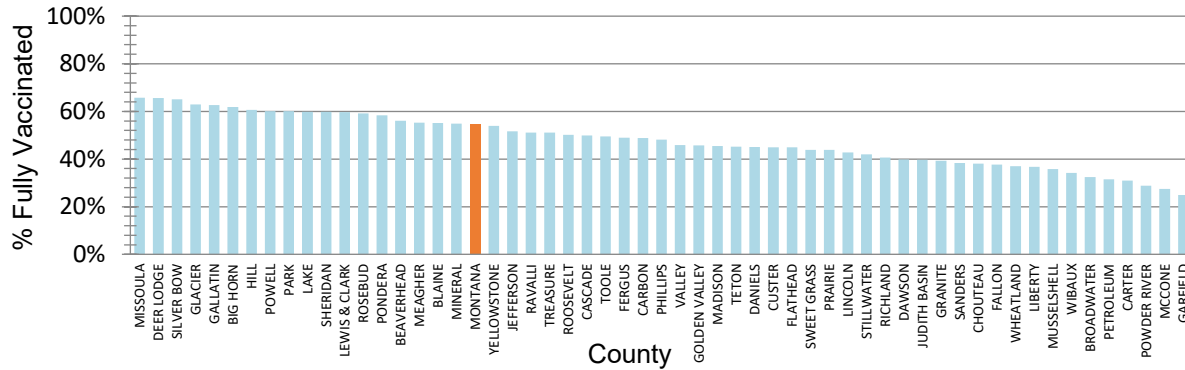


Figure 5. Percent of Eligible Montanans (5+ years) Fully Vaccinated by County – Montana, 3/4/2022



Variant and Breakthrough Cases

Figure 7 displays the percentage of the most common SARS-CoV-2 lineages detected each week, of all Montana samples sequenced that were collected that week. There were 12,312 samples from Montana that were sequenced and their lineages were reported to GISAID since September 2020; figure 6 displays the number of specimens sequenced by week.

As of March 8, there have been 3,259 cases in Montana infected with the Omicron variant. In the last two weeks, 142/142 (100%) specimens that were collected and sequenced were Omicron. In the last four weeks 872/873 (99.9%) specimens that were collected and sequenced were Omicron, and one was Delta. Omicron is the dominant circulating strain in the state, and is displayed in brown on the chart below.

Figure 6. Number of COVID-19 samples sequenced by collection date, Montana 3/5/2022 [n=12,312]

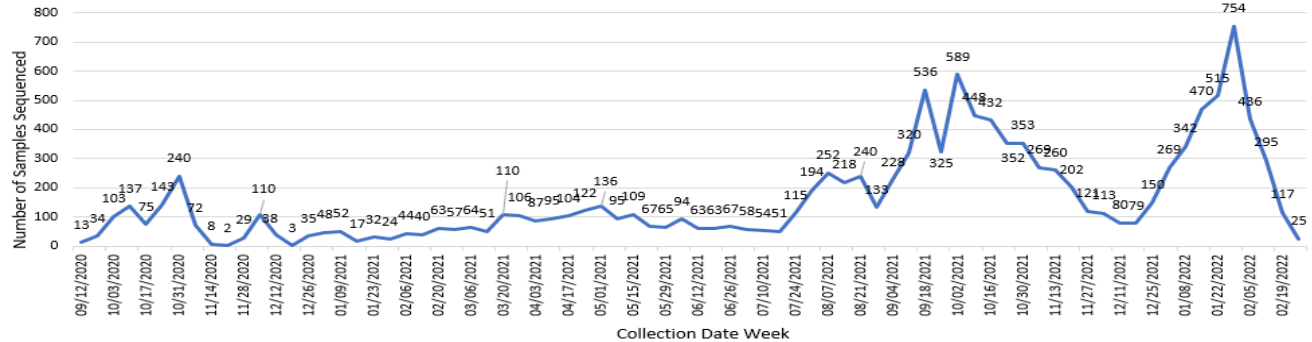
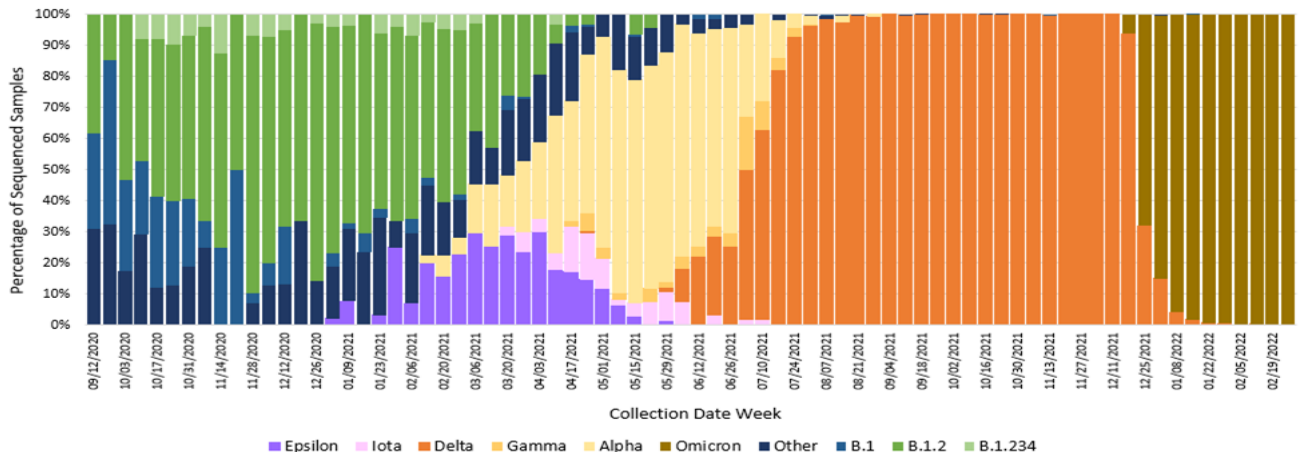


Figure 7. Percent of COVID-19 variants in sequenced samples by collection date, Montana 3/5/2022



A breakthrough COVID-19 infection is defined as a positive SARS-CoV-2 specimen collected ≥ 14 days after completing the primary COVID-19 vaccine series of an FDA-authorized COVID-19 vaccine. Studies show that protection from COVID vaccination decreases over time; in response, the CDC has recommended booster doses for eligible populations to protect against waning immunity. As of 3/4/2022, Montana reports 41,439 cases of confirmed breakthrough disease, which includes 1,376 hospitalizations and 370 deaths. CDC data from December show that unvaccinated adults were more than 3 times more likely to become infected with COVID, compared to fully vaccinated adults with a booster dose. Additionally, unvaccinated adults had 41 times the risk of dying from COVID-19 compared to fully vaccinated adults with booster doses.¹

Hospitalizations and Deaths and Vaccination Status

COVID-19-related hospitalizations and deaths were analyzed between **April 1, 2021 and March 4, 2022** to review vaccination status. Since the beginning of April 2021, 80% of Montanans who were hospitalized and 77% of those who died were unvaccinated at the time of infection (Table 3). Of the 6,859 individuals who were hospitalized during this time period, 128 (2%) were <18 years old, 939 (14%) were 18 to 44 years old, 2,255 (33%) were 45 to 64 years old and 3,537 (52%) were ≥ 65 years old.

Additionally, COVID-19-related hospitalization and death data from **January 8 – March 4, 2022** (last 8 weeks) were analyzed to review vaccination status. Sixty-six percent of Montanans who were hospitalized and 70% of those who died had not received a COVID-19 vaccine (Table 4). Of the 1,147 individuals who were hospitalized during this time period, 38 (3%) were <18 years old, 122 (11%) were 18 to 44 years old, 289 (25%) were 45 to 64 years old and 698 (61%) were ≥ 65 years old.

Table 3. Vaccination status of COVID-19 hospitalizations and deaths – April 1 to March 4, 2022

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	6,859	1,616
UNVACCINATED	5,491 (80%)	1,247 (77%)
VACCINATED (BREAKTHROUGH CASE)	1,368 (20%)	369 (23%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-102 (63)	23-103 (71)
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	7-103 (73)	20-101 (81)

Table 4. Vaccination status of COVID-19 hospitalizations and deaths – January 8 to March 4, 2022

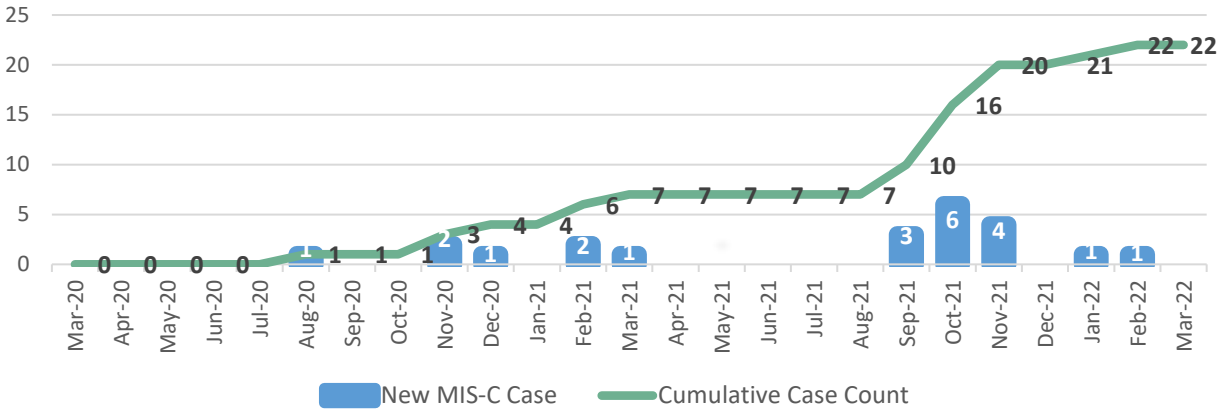
	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	1,147	217
UNVACCINATED	753 (66%)	151 (70%)
VACCINATED (BREAKTHROUGH CASE)	394 (34%)	66 (30%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-101 (68)	30-101 (74)
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	7-103 (72)	48-100 (80)

¹ CDC – COVID Data Tracker – Rates of COVID-19 Cases and Deaths by Vaccination Status.
<https://covid.cdc.gov/covid-data-tracker/#rates-by-vaccine-status>. March 1, 2022.

Multisystem Inflammatory Syndrome in Children (MIS-C)

As of March 4, 2022, there have been a total of 22 reported cases of multisystem inflammatory syndrome in children, or MIS-C, reported in Montana. There have been no deaths. Ages range from less than 1 year to 20 years old; median is 8 years. Ten cases were female, 12 were male. Cases are from 13 counties around Montana. The first case of MIS-C was reported in August 2020; 15 of the 22 cases have been reported since September 2021 (Figure 8).

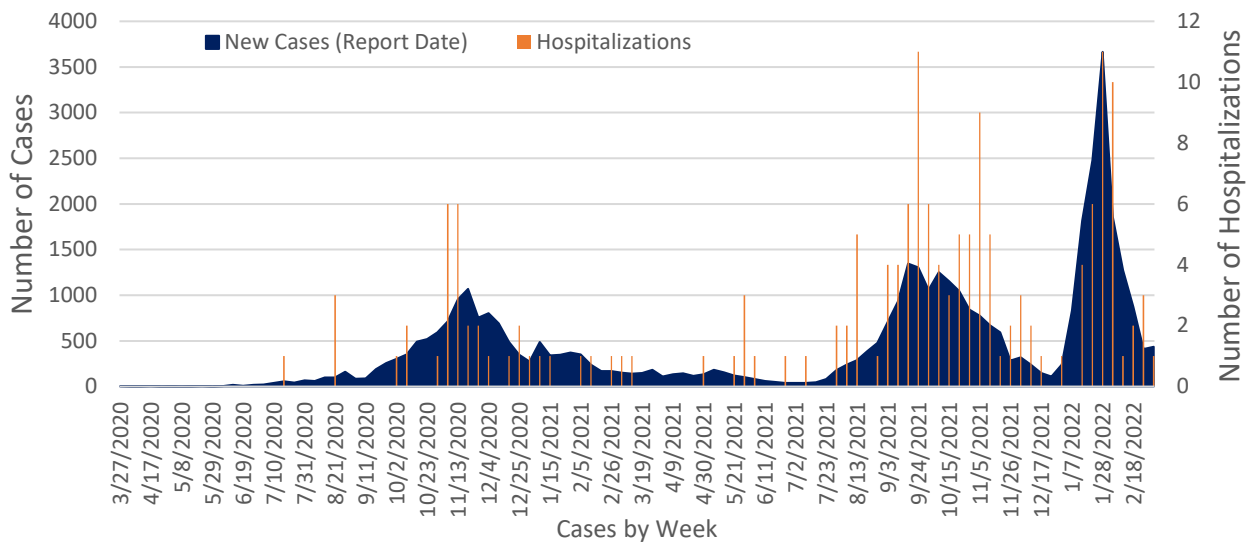
Figure 8. Montana MIS-C Cases by Month of Onset, March 2020 – March 2022



Cases and Hospitalizations Associated with COVID-19 Among Children

To date, there have been 42,664 children <18 years old in Montana diagnosed with COVID-19. Of those, 164 (<1%) have been hospitalized. Case rates among children follow a similar pattern to COVID-19 cases among all age groups (see Figure 1 for comparison) and increased sharply during the recent Omicron surge (Figure 9). There were 435 cases of COVID-19 in children reported during the week of February 26 – March 4, 2022, which is a 6% increase in cases among that age group compared to the previous week. One hospitalization in a child was reported that week.

Figure 9. COVID-19 Cases and Hospitalizations by Week, March 2020 – March 4, 2022, Children <18



Reported COVID-19 Cases by County with Trendline – Montana, past 6 weeks

County	28-Jan	4-Feb	11-Feb	18-Feb	25-Feb	4-Mar	change from previous week*	Trendline
Beaverhead	154	61	29	12	12	10	-2	
Big Horn	430	205	335	241	9	6	-3	
Blaine	142	33	188	23	9	61	52	
Broadwater	41	34	25	30	13	6	-7	
Carbon	90	52	33	15	11	15	4	
Carter	13	3	2	2	2	6	4	
Cascade	1720	1177	960	965	717	464	-253	
Chouteau	22	28	27	13	12	3	-9	
Custer	152	80	53	35	8	8	0	
Daniels	10	11	13	1	3	3	0	
Dawson	107	110	37	8	8	11	3	
Deer Lodge	191	112	73	27	39	30	-9	
Fallon	23	18	17	6	0	0	0	
Fergus	155	66	76	74	22	17	-5	
Flathead	1299	1008	638	1043	642	738	96	
Gallatin	1860	723	423	257	180	127	-53	
Garfield	13	2	4	3	0	0	0	
Glacier	354	273	175	204	32	87	55	
Golden Valley	7	6	5	0	1	0	-1	
Granite	9	15	8	9	2	0	-2	
Hill	313	156	159	33	24	89	65	
Jefferson	164	91	64	21	4	6	2	
Judith Basin	12	5	6	3	1	0	-1	
Lake	601	170	128	234	65	17	-48	
Lewis and Clark	1499	965	327	172	94	61	-33	
Liberty	25	15	10	5	7	5	-2	
Lincoln	233	173	89	41	41	15	-26	
Madison	63	47	24	12	4	1	-3	
McCone	14	13	6	3	1	0	-1	
Meagher	44	10	17	3	3	1	-2	

County	28-Jan	4-Feb	11-Feb	18-Feb	25-Feb	4-Mar	change from previous week*	Trendline
Mineral	83	37	23	13	4	5	1	
Missoula	2506	1559	538	307	162	130	-32	
Musselshell	36	14	21	5	4	3	-1	
Park	285	130	176	87	14	19	5	
Petroleum	5	0	1	0	0	0	0	
Phillips	31	22	23	9	1	9	8	
Pondera	93	58	32	8	4	3	-1	
Powder River	14	6	6	5	2	1	-1	
Powell	99	45	51	9	6	5	-1	
Prairie	6	14	6	3	0	0	0	
Ravalli	296	214	119	42	46	26	-20	
Richland	154	80	44	20	13	20	7	
Roosevelt	197	203	156	68	26	29	3	
Rosebud	94	81	356	142	68	12	-56	
Sanders	113	36	42	16	11	13	2	
Sheridan	24	22	24	8	1	8	7	
Silver Bow	618	181	134	71	40	18	-22	
Stillwater	40	41	30	14	7	26	19	
Sweet Grass	33	21	9	2	7	2	-5	
Teton	62	33	14	11	9	2	-7	
Toole	48	63	23	8	3	1	-2	
Treasure	8	7	2	0	0	0	0	
Valley	45	53	41	18	12	7	-5	
Wheatland	35	23	18	6	0	2	2	
Wibaux	7	5	0	1	0	0	0	
Yellowstone	3106	1482	657	323	204	459	255	
MONTANA	17798	10092	6497	4691	2610	2587	-23	

*Note: Data are based on the date of report into the Montana Infectious Disease Information System (MIDIS). Underlined numbers in the above table reflect adjusted counts and may include cases diagnosed but not reported in earlier time frames. These adjustments result from local and state data reconciliation efforts, conducted to ensure accurate data.

County name	Eligible population 5+	Dose 1	Dose 2	Dose 3	Fully Immunized	Total Doses Administered	Percent eligible with first dose (5+)	Percent Fully Vaccinated (5+)
BEAVERHEAD	9,091	5,477	4,398	2,573	5,094	12,448	60%	56%
BIG HORN	11,975	8,207	7,041	2,720	7,413	17,968	69%	62%
BLAINE	6,044	3,726	3,126	1,490	3,335	8,342	62%	55%
BROADWATER	6,092	2,372	1,735	934	1,977	5,041	39%	32%
CARBON	10,476	5,578	4,768	2,652	5,117	12,998	53%	49%
CARTER	1,141	376	331	180	353	887	33%	31%
CASCADE	76,124	42,734	33,938	17,390	37,997	94,062	56%	50%
CHOUTEAU	5,430	2,224	1,882	1,280	2,069	5,386	41%	38%
CUSTER	10,692	5,343	4,297	2,324	4,804	11,964	50%	45%
DANIELS	1,559	741	647	343	702	1,731	48%	45%
DAWSON	8,071	3,507	2,906	1,573	3,214	7,986	43%	40%
DEER LODGE	8,887	6,345	5,259	3,212	5,836	14,816	71%	66%
FALLON	2,646	1,082	948	466	998	2,496	41%	38%
FERGUS	10,495	5,473	4,738	2,733	5,137	12,944	52%	49%
FLATHEAD	99,993	51,930	40,573	22,020	44,856	114,523	52%	45%
GALLATIN	110,900	82,559	63,294	33,082	69,490	178,935	74%	63%
GARFIELD	1,188	319	253	103	296	675	27%	25%
GLACIER	12,447	10,460	7,269	3,151	7,827	20,880	84%	63%
GOLDEN VALLEY	788	389	328	158	360	875	49%	46%
GRANITE	3,218	1,448	1,155	607	1,262	3,210	45%	39%
HILL	14,914	9,873	7,657	4,041	9,040	21,571	66%	61%
JEFFERSON	11,819	6,716	5,692	3,212	6,104	15,620	57%	52%
JUDITH BASIN	1,880	794	686	383	747	1,863	42%	40%
LAKE	29,280	19,872	16,311	8,730	17,523	44,913	68%	60%
LEWIS & CLARK	66,257	45,012	36,719	21,213	39,589	102,944	68%	60%
LIBERTY	2,234	853	720	444	820	2,017	38%	37%
LINCOLN	19,480	9,426	7,614	4,172	8,321	21,212	48%	43%
MADISON	8,589	4,389	3,470	2,052	3,906	9,911	51%	45%
MCCONE	1,562	453	419	236	428	1,108	29%	27%
MEAGHER	1,726	1,006	869	496	953	2,371	58%	55%
MINERAL	4,302	2,619	1,893	1,180	2,360	5,692	61%	55%
MISSOULA	115,881	84,712	70,206	40,418	76,244	195,336	73%	66%
MUSSELSHELL	4,458	1,722	1,399	722	1,595	3,843	39%	36%
PARK	15,969	11,162	8,663	4,935	9,590	24,760	70%	60%
PETROLEUM	483	162	142	85	152	389	34%	31%
PHILLIPS	3,675	1,903	1,462	897	1,770	4,262	52%	48%
PONDERA	5,389	3,541	2,770	1,440	3,146	7,751	66%	58%
POWDER RIVER	1,588	499	401	203	458	1,103	31%	29%
POWELL	6,534	4,214	3,139	1,862	3,930	9,215	64%	60%
PRAIRIE	994	462	412	235	436	1,109	46%	44%
RAVALLI	42,972	24,432	19,586	11,811	21,968	55,829	57%	51%
RICHLAND	10,310	4,455	3,507	1,837	4,190	9,799	43%	41%
ROOSEVELT	9,918	5,649	4,226	2,021	4,975	11,896	57%	50%
ROSEBUD	8,160	5,426	4,306	2,155	4,829	11,887	66%	59%
SANDERS	11,641	5,017	4,159	2,287	4,457	11,463	43%	38%
SHERIDAN	3,075	1,931	1,706	977	1,839	4,614	63%	60%
SILVER BOW	33,267	23,754	20,285	11,160	21,630	55,199	71%	65%
STILLWATER	9,451	4,334	3,419	2,035	3,971	9,788	46%	42%
SWEET GRASS	3,523	1,700	1,321	789	1,546	3,810	48%	44%
TETON	5,819	3,109	2,190	1,237	2,631	6,536	53%	45%
TOOLE	4,391	2,325	1,763	812	2,171	4,900	53%	49%
TREASURE	623	425	295	141	318	861	68%	51%
VALLEY	6,931	3,364	2,719	1,668	3,175	7,751	49%	46%
WHEATLAND	2,035	803	697	397	752	1,897	39%	37%
WIBAUX	898	354	299	128	307	781	39%	34%
YELLOWSTONE	153,378	92,224	76,484	39,049	82,754	207,757	60%	54%
MONTANA	1,020,663	628,982	506,492	274,451	556,762	1,409,925	62%	55%